

# VMware vCenter Site Recovery Manager

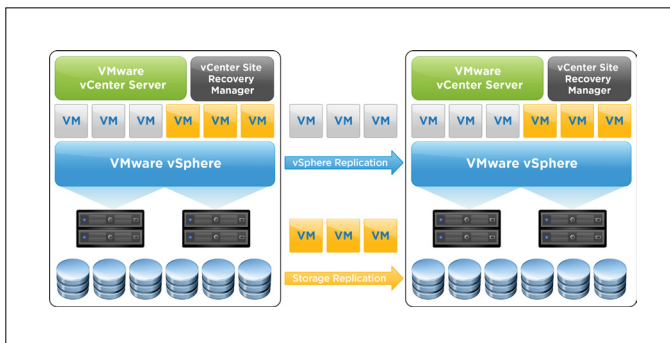
Automated Disaster Recovery Orchestration

## AT A GLANCE

VMware vCenter™ Site Recovery Manager™ is the industry-leading disaster recovery management solution. Site Recovery Manager offers automated orchestration and non-disruptive testing of centralized recovery plans for all virtualized applications. It can integrate natively with VMware vSphere® Replication™ and support a broad range of array-based replication products available by all major VMware storage partners.

## BENEFITS

- Lower the cost of disaster recovery by up to 50 percent
- Application-agnostic protection eliminates the need for app-specific point solutions
- VMware Virtual SAN™ integration reduces the DR footprint through hyper-converged, software-defined storage
- vSphere Replication integration delivers VM-centric, replication that eliminates dependence on storage
- Support for array-based replication offers choice and options for synchronous replication with zero data loss
- Centralized management of recovery plans directly from the vSphere Web Client replaces manual runbooks
- Self-service, policy based provisioning via VMware vRealize™ Automation™ automates protection
- Frequent, non-disruptive testing of recovery plans ensures highly predictable recovery objectives
- Automated orchestration of site failover and failback with a single-click reduces RTOs with reliability
- Planned migrations workflows enable disaster avoidance and data center mobility



vCenter Site Recovery Manager automates the failover and migration of virtual machines to a secondary site. vCenter Site Recovery Manager relies on either vSphere Replication or a storage-based replication product to replicate virtual machines to the recovery site.

## What Is vCenter Site Recovery Manager?

vCenter Site Recovery Manager is the industry-leading disaster recovery (DR) management solution. Site Recovery Manager provides automated orchestration and non-disruptive testing of centralized recovery plans for all virtualized applications.

Site Recovery Manager can integrate natively with vSphere Replication and support a broad set of array-based replication products available by all major VMware storage partners.

A deployment founded on vSphere and complemented with Site Recovery Manager can dramatically lower the cost of DR through management and testing automation that eliminates the complexity of legacy processes, while ensuring fast and highly predictable recovery time objectives (RTO) to maintain business continuity.

## How Does It Work?

**VMware vCenter Server™.** Site Recovery Manager instances deployed at both production and recovery sites integrate directly with local vCenter Server instances.

**Replication.** Site Recovery Manager requires an underlying replication technology to copy virtual machine (VM) data to the recovery site.

- **vSphere Replication.** VMware's hypervisor-based replication technology enables VM-centric, storage-independent replication with customizable recovery point objective (RPO) and multiple point-in-time recovery. vSphere Replication is included with most vSphere editions at no additional cost. [Learn more.](#)
- **Array-based replication.** Site Recovery Manager integrates with third-party storage array-based replication products through a Storage Replication Adapter (SRA). See the [compatibility guide](#) for supported SRAs.

## Key Benefits

Traditional DR solutions often fail to meet business requirements because they are too expensive, complex and unreliable. Organizations using Site Recovery Manager ensure highly predictable RTOs at a much lower cost and level of complexity.

**Lower cost for DR.** Site Recovery Manager can reduce the operating overhead by 50 percent by replacing complex manual runbooks with simple, automated recovery plans that can be tested without disruption. For organizations with an RPO of 15 minutes or higher, vSphere Replication can eliminate up to \$10,000 per TB of protected data with storage-based technologies. The combined solution can save over USD \$1,100 per protected virtual machine per year. These calculations were validated by a third-party global research firm. [Read the complete study.](#)

Integration with Virtual SAN reduces the DR footprint through hyper-converged, software-defined storage that runs on any standard x86 platform. Virtual SAN can decrease the total cost of ownership for recovery storage by 50 percent. [Read more.](#)

**Hardware and app independence.** The combination of vSphere, Virtual SAN and vSphere Replication provides a DR infrastructure that is completely hardware-independent at the compute and storage layers. Site Recovery Manager offers DR automation for any vSphere VM.

**Choice for replication.** Companies can use vSphere Replication to eliminate storage lock-in and simplify data management with a VM-centric approach, or array-based technologies to leverage current storage investments or ensure zero data loss through synchronous replication.

**Simplified setup.** Setting up a recovery plan can be done in a matter of minutes, instead of the weeks as required with manual runbooks. Ongoing DR provisioning to new VMs can be tenant-driven through predefined policies via blueprints in vRealize Automation.

**Peace of mind.** Recovery plans can be tested as frequently as required without disrupting production systems through automation. A detailed report of the testing outcomes, including RTO achieved, delivers confidence that DR objectives were met and provides a way to demonstrate compliance with regulatory requirements.

**Automated execution.** Every DR workflow is automated to minimize RTOs and eliminate errors from manual processes. Automation also enables different use cases. The failover workflow enables disaster recovery with an emphasis on minimizing recovery time. The planned migration workflow enables proactive disaster avoidance and data center mobility without data loss in an application-consistent state. The failback workflow enables bi-directional migrations with ease.

**DR to the Cloud services.** Companies that don't have the financial resources to invest in a secondary site can use the cloud of a Service Provider as recovery infrastructure.

VMware has built an ecosystem of Service Providers that offer cloud-based DR services powered by Site Recovery Manager. [Find a Provider.](#)

For organizations looking for a DR service fully delivered and supported by VMware, the company offers VMware vCloud® Air™ Disaster Recovery. [Learn more.](#)

## Key Features and Capabilities

### VM-centric, policy-based storage and replication

- Replicate in flexible topologies – e.g. from external SAN/NAS to Virtual SAN – no need for matching storage at source and target
- Provision and manage replication at the VM level – no more replicating LUNs
- Define storage policies to be applied at the destination Virtual SAN datastore while configuring replication

### Centralized recovery plans

- Create and manage recovery plans directly from the converged user interface of the vSphere Web Client
- Pre-define the boot sequence of VMs for automated recovery
- Reconfigure IP addresses at the subnet or individual address level
- Concurrently protect and recover thousands of VMs

### Self-service, policy-based provisioning

- VMware vCenter Orchestrator™ plugin for Site Recovery Manager
- Tenant-driven provisioning of pre-defined DR policies via blueprints in vRealize Automation

### Non-disruptive testing

- Automated recovery of VMs into an isolated testing network
- Cleanup of testing environment after completion
- Detailed report with testing outcomes from vCenter Server

### Automated disaster recovery failover

- Initiate recovery plan execution with a single click of a button.
- Halt replication and promote replicated VMs for fastest recovery
- Execute user-defined scripts and pauses during recovery

### Planned migration and disaster avoidance

- Graceful shutdown of protected VMs at the original site
- Replication sync of protected VMs prior to migration to avoid data loss
- Restart of VMs in an application-consistent state

### Automated failback

- Re-protect VMs by reversing replication to the original site
- Automated failback site using original recovery plan

## How to Buy

vCenter Site Recovery Manager is available in two editions to help you protect your environment according to business needs.

SRM STANDARD	SRM ENTERPRISE
Designed for small environments. Protects up to 75 VMs per site.	For larger environments. No licensing limitation on the number of protected VMs

### Licensing

Both editions of Site Recovery Manager are licensed “per protected virtual machine”.

Site Recovery Manager Enterprise can also be licensed on a “per CPU” basis as part of the VMware vCloud Suite® Enterprise. [Learn more.](#)

## Learn More

For more information or to purchase VMware products, call 877-4-VMWARE (outside North America, +1-650 -427-5000), visit <http://www.vmware.com/products>, or search online for an authorized reseller. For detailed product specifications and system requirements, refer to the vSphere documentation.

